REMARKS

This amendment is responsive to the non-final Office Action issued April 30, 2009. Reconsideration and allowance of claims 3-5 and 7-22 are requested.

The Office Action

Claims 1-12 stand rejected under 35 U.S.C. § 101.

Claims 1, 6, 11, 13, 16, and 20 stand rejected under 35 U.S.C. § 102, second paragraph.

Claims 1, 2, 4-6, 13-15, and 20 stand rejected under 35 U.S.C. § 103 over Snyder (US 6,287,328).

Claims 3, 7-12, and 16-20 do not stand rejected on art and are understood to contain allowable subject matter once the 35 U.S.C. § 101 and 35 U.S.C. § 112 rejections are satisfactorily resolved.

35 U.S.C. § 101

Method claims 1, 6, and 11 have been amended to be more tied to a particular apparatus or to set forth a transformative step. For example, independent claim 3 starts with monitored signals carried on leads, processes the signals, and generates an alert on a user interface.

It is submitted, as amended, claims 2-5 and 7-12 comply fully with the requirements of 35 U.S.C. § 101

35 U.S.C. § 112

The claims have been amended to address the 35 U.S.C. § 112 issues raised by the Examiner. With these amendments, it is submitted that all claims now comply fully with the requirements of 35 U.S.C. § 112.

The Claims Distinguish Patentably Over the References of Record

Claim 3 has been placed in independent form and amended to address the 35 U.S.C. § 101 and 35 U.S.C. § 112 issues. Because claim 3 does not stand rejected on art, it is submitted that claim 3 and claims 4 and 5 dependent therefrom are now in condition for allowance.

Claim 9, which was not rejected on art, has been placed in independent form and amended to address the 35 U.S.C. § 101 and 35 U.S.C. § 112 issues. With this amendment, it is submitted that claim 9 and claims 7, 8, and 10 dependent therefrom are now in condition for allowance.

Claim 11, which does not stand rejected on art, has been amended to address the 35 U.S.C. § 101 and 35 U.S.C. § 112 issues. With the resolution of these issues, it is submitted that claim 11 and claim 12 dependent therefrom distinguish patentably and unobviously over the references of record.

Claim 13 has been amended to address the 35 U.S.C. § 112 issues raised by the Examiner. Claim 13 calls for a processor programmed to employ hypothesis testing, a specific improvement over the prior art. Snyder lists a variety of inference processing techniques at column 4, lines 54-59 and column 7, lines 54-63, referenced by the Examiner. Conspicuous by its absence in Snyder is any suggestion of employing hypothesis testing. It is submitted that because Snyder sets forth numerous processing options with no guidance to select any one of the group, and because such group does not include hypothesis testing as set forth in claim 13, it is submitted that Snyder teaches away from hypothesis testing.

Accordingly, it is submitted that claim 13 and claims 14, 15, and 21 dependent therefrom distinguish patentably and unobviously over the references of record.

Claim 16 has been amended to address the 35 U.S.C. § 112 issues. Because claim 16 does not stand rejected on art, it is submitted that claim 16 and claims 17-19 dependent therefrom distinguish patentably and unobviously over the references of record.

Claim 20 has been amended to address the 35 U.S.C. § 112 issues.

Claim 20 has also been amended to call for the assumption that pairs of samples of the monitored signals have a common distribution as corresponding pairs of historical versions of the monitored signals. The Snyder analysis is based on current signals and does not make use or fairly suggest the use of historical versions of the monitored signals.

Accordingly, it is submitted that claim 20 distinguishes patentably and unobviously over the references of record.

The Specification

The specification has now been amended to refer consistently to the signals using capital letters $(S_1, S_2, S_3, ..., S_n)$ and the typos in Equation (2) have been corrected. Accordingly, it is submitted that the Examiner's objections to the specification have now been resolved.

It is submitted that Equation (3) is accurate, as originally presented. The first line of the following text explains that the summation is over all signals that correlate with signal i. It is submitted that this sentence renders clear and definite what the upper limit of the summation is.

CONCLUSION

For the reasons set forth above, it is submitted that claims 3-5 and 7-22 distinguish patentably over the references of record and meet all statutory requirements. An early allowance of all claims is requested.

In the event the Examiner considers personal contact advantageous to the disposition of this case, the Examiner is requested to telephone Thomas Kocovsky at 216.363.9000.

Respectfully submitted,

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